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First Named Inventor

Fernandez

Art Unit

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Examiner Name

Walters, John Daniel

Attorney Docket Number

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**ENCLOSURES (Check all that apply)**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: )  
Dennis S. Fernandez )  
Application No. 10/626,877 )  
Filed: 07/23/2003 )  
For: TELEMATIC METHOD )  
AND APPARATUS WITH )  
INTEGRATED POWER )  
SOURCE )

Examiner: Walters, John Daniel

Art Unit: 3618

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**REPLY BRIEF**

**IN SUPPORT OF APPELLANTS' APPEAL  
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In response to Examiner's Answer, mailed July 25, 2006, Appellant files a Reply Brief as follows. Responsive to Examiner's rejections under 35 U.S.C. 102(e) and 35 U.S.C. 103(a), Appellant has provided arguments for the allowance of claims 1-20.

Appellant hereby submits this Reply Brief pursuant to 37 CFR 41.37 and 41.41 with authorities and arguments in support of appeal from the Final Rejection by Examiner, mailed November 18, 2004, in the above captioned case. Furthermore, Appellant asserts that this Reply Brief does not include any new or non-admitted amendment, or any new or non-admitted affidavit or other evidence. Therefore, Appellant respectfully requests consideration of this Reply Brief by the Board of Patent Appeals and Interferences for allowance of the above-captioned patent application.

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**I. Real party in interest**

The real party in interest is Dennis Fernandez, an individual, having a residence at 1175 Osborn Avenue, Atherton, CA 94027.

**II. Related appeals and interferences**

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal, which will directly affect, be directly affected by, or have a bearing on the Board's decision.

**III. Status of claims**

Claims 1-20 are currently pending, Claims 1, 12, and 13 being independent claims. Claim 21 is cancelled. These pending claims are being appealed, and are appended herewith in the **Claims appendix**.

**IV. Status of amendments**

Previously, in the Final Office Action mailed on November 28, 2005, Examiner rejected claims 1-2, 4-11, 13, and 15-20 as being anticipated by Cramer et al. under 35 U.S.C. 102(e); claims 3 and 14 as being unpatentable over Cramer et al. under 35 U.S.C. 103(a); and claim 12 is rejected under 35 U.S.C. 102(e) as anticipated by Cramer et al. or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Cramer et al. reference. (US 2003/0230443 A1).

All claims 1-20 on appeal are provided in the **Claims appendix**, as filed in Amendment dated December 22, 2005, in response to Final Office Action mailed November 28, 2005.

**V. Summary of claimed subject matter**

Claims 1, 12, and 13 are independent claims pending in this appeal. The invention is an apparatus and method for vehicle power and telematic control, wherein an electronic controller is coupled to a fuel cell module and a telematic appliance (in the above-captioned patent application, please see lines 11-24 of page 6, lines 1-3 of page 7, and Figure 2a), such that the electronic controller controls the fuel cell module electrical power adaptively to generate electrical power for the telematic appliance (please see lines 21-23 of page 12, lines 1-15 of page 13, and Figure 4). In particular, software run by such controller adaptively controls the power by redistributing power reactively or proactively according to a determined load ratio, or power usage proportion. (please see lines 3-23 of page 22, lines 1-13 of page 23, and Figure 7).

**VI. Grounds of rejection to be reviewed on appeal**

- A. Claims 1-2, 4-11, 13, and 15-20 are rejected under 35 U.S.C. 102(e), as being anticipated by Cramer et al. (US 2003/0230443 A1).
- B. Claims 3 and 14 are rejected under 35 U.S.C. 103(a), as being unpatentable over Cramer et al. reference. (US 2003/0230443 A1).

C. Claim 12 is rejected under 35 U.S.C. 102(e) as anticipated by Cramer et al. or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Cramer et al. reference. (US 2003/0230443 A1).

## **VII. Argument**

### **A. Claims 1, 2, 4-11, 13 and 15-20 are not anticipated by Cramer et al. under 35 U.S.C. 102(e).**

#### **1. Claim 1**

In Examiner's answer, mailed July 25, 2006, to the Response to Non-Compliant Appeal Brief, filed June 26, 2006, appealing from the Final Office action, mailed November 28, 2005, Examiner rejects claim 1 under 35 U.S.C. § 102(e), and relies upon Cramer's disclosure in Fig. D10, item 320, and paragraph [0338]; Fig. CR3, items 110 and 139; Fig. D10, item 322; Fig. D8 and D10, item 318, and paragraph [0344]; Fig. D10, item 324, and paragraph [0346] lines 6-7; the reference's paragraphs [0309], [0306], [0307] and with particular attention, paragraphs [0311], [0312], [0317], [0318], [0332], [0333], and [0338] as the basis for rejecting Appellant's claim language in reference to the electronic controller's capability of adaptively redistributing power retroactively or proactively to a determined load ratio or power usage proportion.

Examiner's novelty rejection begins with merely a listing of invention elements that comprise Cramer et al. that are similar to elements that comprise Appellant's invention. For example, Examiner attempts to show lack of novelty by mentioning that Cramer et al. comprises similar components as mentioned in Claim 1 of Appellant's application, such as an electronic controller (Fig. D10, item 320 Central Controller; and

paragraphs [0338] and [0346]), a fuel cell module (Fig. CR3, item 110 Fuel Cell); and a telematic appliance (Fig. D10, item 322 Telematics). Examiner argues that these components of Cramer et al. carry out functions described in claim 1 of Appellant's invention.

However, Appellant argues that the electronic controller of Claim 1 does something quite different than the Central Controller of Cramer et al., Fig. D10, item 320. The Central Controller of Cramer et al. "controls the user display, performs vehicle-level diagnostics, manages vehicle data storage ... and has the capability to run add-on applets," paragraph [0348]. In contrast, the electronic controller of Appellant's Claim 1 functions in an entirely different manner and is designed for an entirely different purpose. Looking to Appellant's Specification, it is disclosed that the "controller (206) couples electrical power from fuel cells (200) *adaptively* to selected telematic appliance (103)," page 30, lines 13-14. For a detailed definition of the term of art "adaptively," see page 30, lines 14-21. Additionally, it is stated that "controller (206) causes electrical power from fuel cell module (200) to be *stored*," page 30, lines 22-23; "controller (206) *configures* fuel cell module (200) to generate 42-volt, 14-volt, or other voltage electrical power," page 31, lines 4-5; "controller (206) controls electrical power in response to a sensor signal provided by telematic appliance," page 31, lines 14-15; and "controller (206) *adaptively controls* electrical power *reactively* in response to measured quality of electrical power signal, *proactively* according to predicted function or scheduled service in telematic appliance (103)," page 31, lines 17-19. In other words, the Central Controller of Cramer et al. acts as the nerve-center or general computer for the vehicle's

various systems, which is in stark contrast to the electronic controller of Appellant's invention, which acts as an *adaptive* intelligent power efficiency management device through *storing, configuring, and adaptively controlling* electrical power, both *reactively* and *proactively*.

Examiner then contends that in Cramer, Figs. D8 and D10, items 318 and 322 respectively, and paragraph [0344], and Fig. CR3, items 110 and 139, demonstrate Appellant's claim language "wherein the electronic controller couples electrical power from the fuel cell module *adaptively* to the telematic appliance," Appellant's application, Claim 1 (italics added). The important term "adaptively" is defined in Appellant's Specification as a method to "mimic, self-learn, compensate, repair, diagnose, adjust, change, compensate, tailor, or otherwise structurally modify," page 30, lines 20-21. The referenced figures and text of Cramer merely disclose desired configurations of vehicle subsystems and components. They do not disclose nor teach the method of Appellant's claim limitation, which is described in the Specification on page 30, lines 13-21 and page 31, lines 4-19. Furthermore, the reference paragraph [0344] merely describes general telematics control wiring, which is how the telematics controller is simply hard-wired to the central controller and an antennae used for wireless communication. As stated before, these figures and associated texts of Cramer do not teach nor suggest Appellant's claim language of the dynamic capability of the electronic controller to couple electrical power from the fuel cell module *adaptively* to the telematic appliance. At most, they demonstrate the fuel cell module as merely connected, via ordinary wiring to the telematics controller.



Next, Examiner argues that Appellant's language in Claim 1 of "having software run by the controller to manage the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion," is disclosed in Fig. D10, item 320 and 324; paragraph [0346], lines 6-7; and paragraphs [0309], [0306], [0307] and with particular attention, paragraphs [0311], [0312], [0317], [0318], [0332], [0333], and [0338] of Cramer et al. Investigating the relevant areas of Cramer et al., Appellant understands that Fig. D10, item 320 and 324; and paragraph [0346], lines 6-7 merely disclose the configuration of a Central Controller and High and Low-Speed CAN's. Also, paragraph [0309] merely discloses main subsystem configurations; [0306] discloses features of the central controller; [0307] discloses user interface characteristics; [0311] discloses ring main power supply design; [0312] discloses dual-fused junction boxes; [0317] discloses 42-volt battery; [0318] discloses dc/dc converter; [0332] discloses ring main power supply architecture possibilities; [0333] discloses electrical fault isolation; and [0338] discloses control system components and configuration. In all of these paragraphs referenced by the Examiner, it is clear that Cramer et al. makes no mention anywhere to a "software," that is designed to function as described in Appellant's Claim 1 language or as detailed in the relevant paragraphs of the Specification, which are page 21, lines 14-15; page 23, lines 5-9; and page 30, lines 7-21.

Without proof of such "software" in Cramer et al., Examiner relies on an inherency argument. Examiner argues that Cramer et al., in Fig. D10 illustrates the

central controller (item 320) adaptively managing power via CANs, which *inherently* comprise software, therefore anticipating Appellant's Claim 1 software. Appellant respectfully argues that Examiner fails to make a valid inherency argument.

Turning to relevant case law, the doctrine of inherency must be analyzed as a question of fact. *In re Napier*, 55 F.3d 610, 613 (Fed. Cir. 1995). The initial burden in establishing an inherency rejection rests with the Examiner, noting that "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Inherency however may not be established by probabilities or possibilities. To establish inherency, the evidence must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Oelrich*, 666 F.2d 578, 581-82 (C.C.P.A. 1981).

Appellant believes that Examiner has merely asserted inherency and thus has not provided a basis in fact and/or technical reasoning to reasonably support the determination that the central controller and CAN's of Cramer et al. in Fig. D10 and the associated texts, *inherently* comprises software as described in Appellant's Claim 1 language, which is designed to manage power adaptively by redistributing such power reactively or proactively according to a determined load ratio or power usage proportion.

Therefore, without factual evidence or technical reasoning, Examiner has failed to make a valid inherency argument.

Furthermore, to defeat Examiner's inherency argument, Appellant here offers examples and evidence of the prior art made of record, by Examiner in the Office Action, mailed November 11, 2005, that *do not* inherently comprise software as claimed in Appellant's invention. In following *Ex parte Levy*, these examples are offered to provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *does not* flow from the teachings of the applied prior art. In comparing the prior art, it is stressed that Appellant's invention "couples electrical power" with a software to "manage the power adaptively," Appellant's Application, Claim 1.

Looking to the first reference cited, Kami (US PAT 6,901,302), which discloses a hydrogen station loading control unit, it is understood that Kami pertains to a method for managing volumes of hydrogen. In comparison, this is a method vastly different than the method of managing *electrical power*, as in Appellant's invention. Also, the software disclosed in Kami (paragraph e., under Summary of the Invention), functions to transmit data on hydrogen volumes from the vehicle to a hydrogen station – which is unrelated to the software of Appellant's invention. Therefore, there is no evidence present in Kami to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

The next reference cited by Examiner is Moskowitz et al. (US PAT 6,339,736), which discloses a system for the distribution of routine maintenance services to a vehicle. The system monitors levels of fuel and other maintenance conditions on a vehicle and accordingly dispatches a service vehicle to perform needed maintenance tasks, i.e., fill the vehicle's tank. The system disclosed by Moskowitz et al. does not disclose any method related to the software of Appellant's invention, which functions to manage and redistribute power *on-board* the vehicle. This is in contrast to bringing fuel *to the vehicle*, as disclosed by Moskowitz. Therefore, there is no evidence present in Moskowitz to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

Also cited by Examiner is Parillo (US PAT 5,442,553), which discloses a system to diagnose and upgrade vehicle software – this discloses nothing related to managing power and is thus unrelated to Appellant's invention. Therefore, Appellant found no evidence present in Parillo to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

Also cited is Nishida (US PAT APP 2005/0060067), which discloses a remote control operation service to control an on-board vehicle device, depending on the state of a storage battery unit. For example, the system can remotely flash a vehicle's headlights in order to help the owner locate the vehicle, but will be careful not to drain battery power too much. The important distinction between Appellant's invention and Nishida lies in Nishida's method of determining whether to perform or reject an operation based

on battery power. Unlike Appellant's invention, Nishida does not disclose any method or software to "manage the power adaptively by redistributing such power reactively or proactively," Appellant's Application, claim 1. Therefore, Appellant found no evidence present in Nishida to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

Also cited is Vickers (US PAT APP 2004/0204797), which discloses an apparatus for regulating an engine in a vehicle, as a function of distance, time, or relative location and energy in the storage cell. This is similar to Appellant's invention, but important differences are present. The apparatus in Vickers "regulates the engine by turning the engine off," Vickers, Claim 3. This is in contrast to Appellant's invention, which aims to "couple electrical power from the fuel cell" and "manage the power adaptively by *redistributing* such power reactively or proactively," Appellant's Application, Claim 1 (*italics added*). Appellant's invention does not simply turn the power off, as disclosed in Vickers, rather Appellant's invention function to *redistribute* power. Furthermore, the method of Vickers is based upon a function of distance, time, or relative location and energy in the storage cell. This is quite different than Appellant's invention, which manages power based upon a completely different set of parameters, such as a "determined load ratio, or power usage proportion," Appellant's Application, Claim 1. Therefore, through a close comparison of the two inventions, Appellant found no evidence present in Vickers to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

Lastly, Examiner cites Kolls (US PAT 6,853,894), which discloses a method of communicating various data between a vehicle and a data processing resource remote to said vehicle, in order to control and monitor vehicle safety and security. This method discloses nothing related to managing power and is thus unrelated to Appellant's invention. Therefore, Appellant found no evidence present in Kolls to suggest that the prior art inherently contains software as disclosed in Appellant's invention.

In conclusion, Appellant stresses that the numerous examples of prior art made of record, and cited by Examiner, *do not* "provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Levy*, 17 U.S.P.Q.2d at 1464. It follows then that without evidence of inherency, Examiner has failed to make a valid inherency argument of Appellant's claimed invention.

## **2. Claim 13**

In Examiner's answer, mailed July 25, 2006, Examiner also rejects claims 2, 4-11, 13, and 15-20 under 35 U.S.C. § 102(e).

Pertaining to Claim 13, Examiner refers to Fig. CR3 and the associated text of paragraphs [0259], which discusses a "digital power manager" that "controls high-power switches to dynamically allocate battery or fuel-cell power to each wheel from either source." This is in contrast, and much different to Appellant's "multi-level voltage unit" of claim 13 which discloses a "software" for adaptively redistributing power from two

voltage sources to a telematic system, reactively or proactively according to a determined load ratio, or power usage proportion. The distinction is apparent in that the “digital power manager” of Cramer et al. simply allocates power to electric motors from either battery or fuel-cell power, while Appellant’s “multi-level voltage unit” runs software, which “adaptively” redistributes power. As disclosed in the Specification, page 30, lines 13-21, the “adaptive” characteristic of Appellant’s multi-level voltage unit is disclosed as the capability to respond, adjust, align, reactively to stimuli or feedback, and to predict or extrapolate proactively according to prior or current stimuli or feedback. Nowhere is it taught or disclosed in Cramer et al. this important characteristic of Appellant’s Claim 13 language.

Next, Examiner states that since the power manager controller is digital it is *inherent* that it has a software package for its operation. This may be true, but it does not necessarily mean that the software is inherently identical or that it functions in the same manner as Appellant’s “software” of Claim 13. As stated above, in order to mount a valid inherency argument, Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the “digital power manager” of Cramer et al. inherently comprises software, as disclosed in Appellant’s Claim 13. Examiner has failed to provide such proof. At most, Examiner has merely asserted inherency. Also, as argued above, Appellant has provided numerous examples to support the determination that the prior art *does not* inherently comprise software as disclosed in Appellant’s invention.

In summary, Appellant strongly believes that Examiner has wrongfully rejected Appellant's application for the forgoing reasons. Therefore, Appellant respectfully submits that independent claims 1, from which claims 2, 4-11 depend, and claim 13, from which claims 15-20 depend, are not anticipated by Cramer et al., and thus Examiner's rejections are erroneous and Appellant's application should be allowed.

**B. Claims 3 and 14 are not unpatentable over Cramer et al. under 35 U.S.C. 103(a).**

Appellant stresses, as extensively argued above, that Cramer et al. does not disclose all of the features of claim 1 from which claim 3 depends and does not disclose all of the features of claim 13 from which claim 14 depends.

Examiner's obviousness argument proceeds by pointing out that Cramer et al. discloses an automotive electrical apparatus in which the electrical power is provided via power buses of 300 volts and 42 volts (paragraph [0318] and paragraph [0317], respectively) rather than Appellant's invention via buses at 36-42 volts and 12-14 volts, respectively. Examiner further states that it is taken as common knowledge and obvious to one of ordinary skill in the art at the time the instant invention was made to have modified the disclosure of Cramer et al. to include multi-level electrical power buses with voltages in the ranges of 36-42 and 12-14 volts, respectively.

In spite of this, Appellant strongly believes that Examiner is overlooking the essential differences between Cramer et al. and the present invention. The differences



here are not merely substituting 300 volts and 42 volts busses for 36-42 volts and 12-14 volts buses respectively, but rather the not so obvious method of Claim 1 from which Claim 3 depends and Claim 13 from which Claim 14 depends, wherein the electronic controller couples electrical power (be it 300/42 volts, 42/14 volts, or 36/12 volts, etc.) from the fuel cell module adaptively to the telematic appliance, with a software begin run by the controller to manage the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion. Appellant's not so obvious method is also detailed in the relevant paragraphs of the Specification, which are page 21, lines 14-15; page 23, lines 5-9; and page 30, lines 7-21.

This essential aspect and difference of Appellant's invention and Cramer et al. are such that the subject matter *as a whole* is argued to not have been obvious at the time the instant invention was made to a person having ordinary skill in the art to which said subject matter pertains. Accordingly, for the forgoing reasons, Appellant respectfully submits that claims 3 and 14 are patentable over Cramer et al., and thus Examiner's rejections are erroneous and Appellant's application should be allowed.

**C. Claim 12 is not anticipated by Cramer et al. under 35 U.S.C. 102(e), or in the alternative, claim 12 is not obvious over Cramer et al. under 35 U.S.C. 103(a).**

As stated before, relative to Claim 1, Cramer et al. does not disclose all of the features of Claim 12. Appellant stresses that Cramer et al. does not teach nor suggest a vehicle power and telematic control system comprising a fuel cell module, telematic

appliance, and electronic controller wherein the controller includes software and couples electrical power from the fuel cell module adaptively to control the power by redistributing such power reactively or proactively according to a determined load ratio or power usage proportion as disclosed in Appellant's claim language or as detailed in the relevant paragraphs of the Specification, which are page 21, lines 14-15; page 23, lines 5-9; and page 30, lines 7-21.

Moreover, with an inherency argument, Examiner argues that Cramer et al. teaches the claimed method of Claim 1, through which the method of Claim 12 is considered inherent. As stated before, "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Levy*, 17 U.S.P.Q.2d at 1464.

Examiner attempts to offer proof and rationale for such inherency of Claim 12 by stating that Cramer et al., in its normal and usual application would necessarily require the claimed method for constructing and operating the system. In addition, Examiner cites Fig. CR3, item 110, paragraph [0238], lines 9-11, and paragraph [0309] as sections of Cramer et al. that disclose the inherent method of claim 12.

Beginning with Fig. CR3, item 110 and paragraph [0238], Appellant observes that the figure discloses a fuel cell (item 110) and traction power management system. It is not understood where Fig. CR3 inherently discloses the method of claim 12, which

pertains to “software” that functions to “control the power adaptively by redistributing such power reactively or proactively,” Appellant’s Claim 12. Similarly with paragraph [0238], which describes seemingly irrelevant vehicle structural design, Appellant believes that the method of Claim 12 is not inherently disclosed. Finally, with paragraph [0309], which discloses general aspects of Cramer et al.’s software and electronics architecture, Appellant stresses that the method of Claim 12 is also not inherently disclosed.

Examiner next cites MPEP Sec. 2111.02 and *In re King*, 801 F.2d 1324, 1326; 231 USPQ 136, 138 (Fed. Cir. 1986) as rationale for the inherency argument. These references essentially state that prior art anticipates a claimed process if the prior art carries out the process during normal operation. This is the definition of *inherency*. However, in order to prove inherency, examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d at 1464. Examiner has failed to provide such basis.

In following *Ex parte Levy*, Appellant here offers a basis in technical reasoning to reasonably support that the method of Claim 12 *is not* inherently carried out by Cramer et al. during normal operation. For example, in some situations, fuel cells may produce enough power to not require an efficient power management and redistribution systems as disclosed in Appellant’s invention. Also, calculating load ratio or power usage proportion, as required by Appellant’s invention, may not be desirable in some situations

because such calculations require more time, which slows down processing cycle, and may deplete energy. In addition, to follow *Ex parte Levy* and offer a basis in fact where Appellant's invention *is not* inherently carried out during normal operation, Appellant has previously provided (see section VII, subsection A of this Reply Brief ) numerous examples of prior art made of record, and cited by Examiner, that *do not* inherently comprise the claimed method. Therefore, Examiner has failed to make a valid inherency argument.

If inherency fails, in the alternative Examiner argues that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the reference of Cramer et al. to include the claimed method of claim 12. Examiner reasons that Cramer et al. discloses all the structure necessary to perform the claimed functions, and as such Appellant's invention would have been an obvious step.

Appellant argues that Examiner's reasoning is flawed. By merely disclosing an invention with similar structure to Appellant's claim limitations, Cramer does not demonstrate that the claimed subject matter as a whole would have been an obvious step at the time the invention was made to a person having of ordinary skill in the art to which the said subject matter pertains. It is understood that Cramer et al. and Appellant's inventions contain similar elements and components – but that is where the similarities end. As stated before, the uniqueness of Appellant's invention lie in the function of the electronic controller in adaptively coupling electric power, and the software, which manages power adaptively by redistributing such power reactively or proactively. This is

also described in detail in relevant paragraphs of the Specification, which are page 21, lines 14-15; page 23, lines 5-9; and page 30, lines 7-21.

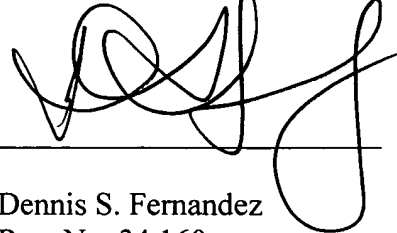
Nothing comparable to these unique characteristics of Appellant's invention are disclosed explicitly, implicitly, or inherently in the prior art of Cramer et al., and therefore unequivocally demonstrate nonobviousness.

### CONCLUSION

For all of the reasons stated above, Appellant respectfully concludes that Examiner was in error to reject claims 1-2, 4-11, 13, and 15-20 under 35 U.S.C. 102(e); claims 3 and 14 under 35 U.S.C. 103(a); and claim 12 under 35 U.S.C. 102(e), or in the alternative under 35 U.S.C. 103 (a) per Cramer et al. As such, Appellant's application should be allowed.

Respectfully Submitted,

FERNANDEZ & ASSOCIATES, LLP

A handwritten signature in black ink, appearing to read 'Dennis S. Fernandez', written over a horizontal line.

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## **VIII. Claims appendix**

### **Claims Presented For Appeal** **(as filed via Rule-116 Amendment dated 12/22/2005)**

1. (PREVIOUSLY PRESENTED) Vehicle power and telematic control system comprising:  
an electronic controller;  
a fuel cell module; and  
a telematic appliance,  
wherein the electronic controller couples electrical power from the fuel cell module adaptively to the telematic appliance, a software being run by the controller to manage the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion.

2. (ORIGINAL) The control system of claim1 wherein:  
the electronic controller stores the electrical power from the fuel cell module by recharging a lithium-ion battery.

3. (ORIGINAL) The control system of claim 1 wherein:  
the electronic controller configures the fuel cell module to generate a 42-volt or 14-volt electrical power.

4. (ORIGINAL) The control system of claim 1 wherein:  
the electronic controller couples to the fuel cell module or the telematic appliance through a shared connection through which a control signal and a power signal is provided.

5. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller couples electrical power from a generator to the telematic appliance.

6. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power in response to a sensor signal provided by the telematic appliance.

7. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a fault or error condition in the telematic appliance.

8. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a media format or load in the telematic appliance.

9. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a location or jurisdiction of the telematic appliance.

10. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power in response to a measured quality of an electrical power signal.

11. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power according to a predicted function or scheduled service in the telematic appliance.

12. (PREVIOUSLY PRESENTED) Vehicle power and telematic control method comprising steps of:

coupling an electronic controller to a fuel cell module and a telematic appliance; and

controlling adaptively by the electronic controller the fuel cell module electrical power to generate electrical power for the telematic appliance, a software being run by the controller to control the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion.

13. (PREVIOUSLY PRESENTED) Automotive electrical apparatus comprising:

a multi-level voltage source; and

a telematic system, coupled to the multi-level voltage unit for accessing a first and second voltage source, a software being run to manage the voltage source adaptively by redistributing power of such voltage source reactively or proactively according to a determined load ratio, or power usage proportion.

14. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the first voltage source comprises a 36-42 volt-source or bus, and the second voltage source comprises a 12-14 volt-source or bus.

15. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

a DC-DC converter couples the first voltage source to the second voltage source.

16. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the telematic system is coupled adaptively to the voltage unit, thereby enabling such voltage unit to provide multi-level voltages to one or more telematic appliances from the group



consisting of a wireless or satellite network or communications device, a digital video or audio media or entertainment device, a global positioning or navigational locator or guidance device, and an image camera, radar or biometric sensor device.

17. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the first or second voltage source comprises a fuel cell stack, whereby such stack enables multi-level voltages to be generated by one or more fuel cells from the group consisting of a proton exchange membrane fuel cell, a tubular solid oxide fuel cell, an alkaline fuel cell, a phosphoric acid fuel cell, and a molten carbonate fuel cell.

18. (PREVIOUSLY PRESENTED) The apparatus of claim 13 further comprising:

a body or power train controller, coupled to the multi-level voltage unit for accessing the first and second voltage source.

19. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the multi-level voltage unit is coupled to a vehicle multimedia bus or a human-machine interface.

20. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the telematic system comprises an optical, magnetic or biometric sensor.

21. **(CANCELED)**

**IX. Evidence appendix**

None.

**X. Related proceedings appendix**

None.